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# **Missouri Market Development Program**

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## **Annual Report for Fiscal Year 2011**

(July 1, 2010 – June 30, 2011)



**EIERA**  
Environmental Improvement and Energy Resources Authority

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# Missouri Market Development Program

## Building Missouri Business

### Introduction

#### Administration

In 1990, the Missouri General Assembly directed the Environmental Improvement and Energy Resources Authority (EIERA) to establish the Missouri Market Development Program to promote the development and maintenance of markets for recovered materials. The EIERA is a quasi-governmental agency, with a Governor appointed bi-partisan Board, which serves as the financing arm of the Department of Natural Resources. The Missouri Market Development Program is housed in the EIERA in order to bridge economic development and environmental interests.

#### Funding

In Fiscal Year 2011, the Missouri Market Development Program was allocated \$800,000 from Missouri's Solid Waste Management Fund.

#### Purpose

The Missouri Market Development Program promotes the development and maintenance of markets for recovered materials and recycled content products throughout Missouri by providing financial incentives, technical assistance and informational services to businesses, governments and other organizations.

Recycling market development helps to ensure that recycling will expand its role in a sustainable Missouri economy, create jobs, conserve resources, contribute to a quality environment, and reduce reliance on Missouri's landfills for disposal of solid waste.

#### Recycling market development is working

- The Missouri Market Development Program's Fiscal Year 2011 investment in 8 Missouri recycling businesses helped to **leverage more than \$2,523,556 million** in total investment, create **56 full time Missouri jobs** and **divert more than 305,896 tons** annually from Missouri landfills. The avoided disposal costs for the materials used in these projects combines to nearly **\$10 million** each year.



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# Missouri Market Development Program

Developing markets through cooperation

## Partners

The cooperation and assistance of several agencies and organizations have been instrumental in the success of the Missouri Market Development Program.

### **Department of Economic Development**

During the fiscal year, the Missouri Market Development Program continued its working relationship with the Department of Economic Development (DED) in support of program objectives. The Missouri Market Development Program and DED coordinate direct assistance to businesses to improve sales and purchases of Missouri products made from recyclable materials.

### **Department of Natural Resources**

The Missouri Market Development Program works closely with the Department of Natural Resources in its administration of the Solid Waste Management Fund and the Solid Waste Management Program's waste reduction and recycling efforts. The Missouri Market Development Program coordinates priorities and evaluation of activities with the Solid Waste Management Program.

### **Office of Administration**

The Missouri Market Development Program, in cooperation with the Office of Administration, promotes recycling in state agencies. The Missouri Market Development Program works with the Office of Administration on the Missouri Interagency Recycling Council and in development of the annual State of Missouri Recycling and Waste Reduction Report.

### **Solid Waste Advisory Board**

The Missouri Market Development Program provides updates on its activities to the Solid Waste Advisory Board (SWAB). The Solid Waste Advisory Board is made up of the chairperson of each of the 20 Solid Waste Management Districts (SWMD), three citizen representatives and two representatives of solid waste management industry.

### **Missouri Market Development Program Steering Committee**

Staff from the Missouri Market Development Program, EIERA, DED, and DNR's Solid Waste Management Program comprise the interdepartmental Market Development Program Steering Committee. The Steering Committee evaluates financial assistance applications and technical assistance proposals submitted to the Missouri Market Development Program and makes funding recommendations to the EIERA board.



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# **Missouri Market Development Program**

Developing markets through cooperation

## **Partners**

### **Missouri Association of Councils of Government**

In Fiscal Year 2011, support for the Missouri Market Development Program was made available through an agreement with the Missouri Association of Councils of Government (MACOG). Plans for seven regional “recovered materials fairs” were developed and work began on a recycling market development assessment and recommendation study.

### **Missouri Enterprise Business Assistance Center**

Through an agreement with Missouri Enterprise the program extended its ability to identify businesses that could benefit from using recovered materials and helping them to design appropriate projects.

### **Mid-America Council of Recycling Officials**

The Missouri Market Development Program represents Missouri on the 14 state Mid-America Council of Recycling Officials (MACRO). As a member of MACRO, the Missouri Market Development Program encourages multi-state recycling, market development, reuse and source reduction efforts.

### **Missouri Recycling Association**

Missouri Market Development Program staff are actively involved in the activities of the Missouri Recycling Association, Missouri's only collective voice for recycling, waste reduction and sustainability issues.

### **Missouri Waste Control Coalition**

The Missouri Market Development Program supports the efforts of the Missouri Waste Control Coalition.

### **National Recycling Coalition**

The Missouri Market Development Program continued its involvement in the National Recycling Coalition. The National Recycling Coalition's Annual Congress is the largest national gathering of recyclers.



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# Missouri Market Development Program

## Business Assistance

### FY 2011 Projects

#### **Mountain Grove – 3-G Processing, LLC**

*3-G Processing, LLC* (Mountain Grove) was awarded \$50,000 to purchase a high-pressure dryer/cooker costing \$910,000 to expand an existing food waste recovery operation. 3-G was formed in 2010 as an offshoot of Grisham Farm Products, a past program participant, to process by-products of Tyson Foods chicken cooking operations. The 3-G plant was initially designed to process 1,000,000 pounds of food waste products daily but demand from Tyson is pushing the company to process 2,000,000 pounds per day, which will be achievable with the new equipment. The 3-G process separates cooking oil from solid food particles. 3-G gives the oil-free solids to Grisham Farm Products that then uses them to produce chicken feed. The oil is sold back to Tyson Foods. 3-G is located in a Missouri Enhanced Enterprise Zone, which indicates an area of high unemployment. 3-G Processing anticipates **diverting 260,000 tons** from the waste stream annually and **creating 30 new full time employee positions** with this project.

#### **Mansfield – Thomason Brothers, Inc.**

*Thomason Brothers, Inc.* (Mansfield) was awarded \$50,000 to purchase a centrifuge costing \$100,000 that would enable an expansion of their current food waste recovery and recycling operation. Thomason Brothers began business in 2005 to produce biodiesel fuel from food waste. The recent economic recession made bio-diesel an unprofitable venture, and the company reorganized to refine its processes for a different market. Thomason Brothers now sells its end product as a “Feed Grade Fat Product” under a license from the Missouri Department of Agriculture. The company believes it is the only one that reprocesses packaged salad dressings, mayonnaise and other food waste products for this market. Thomason Brothers currently operates 24 hours a day, five days a week and needs a second centrifuge to keep up with incoming product. The facility they currently supply could increase orders to 16 tankers a week if Thomason Brothers could supply that large a quantity. Thomason Brothers anticipates **diverting an additional 20,000 tons** from the waste stream annually and **creating nine new full time employees** with this project.

#### **Excelsior Springs – EXT, Inc.**

*EXT, Inc.* (Excelsior Springs) was awarded \$46,000 to refurbish a granulator/pelletizer to enable the company to increase the processing of reclaimed plastics by 200 tons per year. EXT currently uses recovered materials from a variety of Missouri sources to produce newly manufactured plastic parts and products, including agricultural and automotive items, appliance parts, retail displays and other customized products. Recycling of plastics, particularly thermoplastic materials, is an emerging industry and many manufacturers elect not to recycle when faced with the challenges of processing scrap materials into a usable form. EXT manufactures with near zero processing waste and is unique in the thermoforming industry in that it is also an extruder of the plastic sheet used to manufacture thermoformed products. The refurbished equipment will increase capacity for use in the company's operation. EXT, Inc. anticipates **diverting an additional 200 tons** from the waste stream annually and **creating two to three new full time employee positions** with this project.



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# Missouri Market Development Program

## Business Assistance

### FY 2011 Projects (continued)

#### Gainesville – Bryant Plastics, Inc.

*Bryant Plastics, Inc.* (Gainesville) was awarded \$50,000 to purchase a large plastic shredder to allow shredding and grinding of large plastic PVC parts that are now landfilled. After it is shredded, the plastics will be ground and processes into usable PVC roll cores and pipe products in the company's existing operation. Bryan Plastics has been extruding a variety of plastic products for thirty-six years, using ground scrap mixed with virgin material. Products include: sewer and drain pipe, plastic fittings, telecommunications wiring conduit and custom orders. The addition of a larger grinder will enable the company to use material that it currently cannot due to size and weight, and, at the same time, reduce its cost for feedstocks. The company currently processes a variety of PVC waste and a larger shredder will enable it to process additional vinyl house siding and water and sewer pipe that is too large to process with existing equipment. Bryant Plastics anticipates **diverting an additional 240 tons** annually and **creating three new full time employee positions** with this project.

#### Wildwood – Fick Supply Service, Inc.

Fick Supply Service, Inc. (Wildwood) was awarded **\$50,000** to purchase a horizontal grinder costing \$628,400 to expand its existing mulch and compost operation. Fick Supply has operated since 1994, employing 23 people to produce a variety of mulch, topsoil, and compost from waste wood. The company currently has 350 sourcing customers and the company has consistently sold all product produced each year. The new grinder would enable the company to increase maximum specification to 36' diameter with unlimited length and 60" diameter up to three feet. This would enable Fick to process non-homogenous wood waste that is currently being burned or buried, a continuing problem in the St. Louis area. Fick Supply Service anticipates **diverting an additional 18,750 tons** from the waste stream annually and **creating one new full time employee position** with this project.

#### Mountain Grove – Customix Corporation d/b/a Aggieville USA

*Customix Corporation d/b/a Aggieville USA* (Mountain Grove) was awarded \$50,000 to install a new production line costing \$120,000 that would increase capacity by 120% and allow for new product retrieval. Aggieville USA recycles nuts and nut products from food factories, most of which have been downgraded due to production mistakes. By cleaning, separating, roasting and chopping the once landfilled waste products, Aggieville processes the nuts so that they can be used in the bird feeding industry and as other animal feed supplement. The company is currently running twenty-four hours per day, seven days per week and is turning away business. The new equipment would not only enable the company to process two loads at once, but also would shave up to twenty-four hours of production time from some existing loads. Aggieville's current customer base has enough volume to double its existing tonnage if the company could handle the increase. Aggieville USA anticipated **diverting an additional 6,000 tons** from the waste stream annually and **creating five full time and two part time positions** with this project but a fire destroyed the business before the project could be implemented.



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# Missouri Market Development Program

## Business Assistance

### FY 2011 Projects (continued)

#### Kansas City – Foundation Workshop, Inc.

*Foundation Workshop, Inc.* (Grandview) was awarded \$35,500 to purchase a plastic bottle sort system costing \$47,133 to expand its pill bottle recycling operation. The not-for-profit currently collects and manually sorts the HDPE #2 pharmaceutical vials and associated polypropylene caps, servicing a large mail-order pharmacy. Few recycling operations deal with these bottles and Foundation Workshop presently processes all it can handle. Foundation Workshop has provided employment for adults with disabilities since 1975, operating in two Grandview locations employing twenty people plus management staff. Foundation Workshop anticipates **diverting an additional 156 tons** from the waste stream annually and **creating two new full time employee positions** with this project.

#### St. Charles – Nike IHM

Nike IHM (St. Charles) was awarded \$50,000 to purchase a pelletizer costing \$350,000 that would enable the company to buy scrap plastic from its existing customers and process it to a useable form. Nike IHM produces a variety of plastics components for Nike and for other industries, specializing in custom extrusion of plastic sheet, roll stock and tube, with integrated fabrication capability. Opportunities for recycling the polyether thermo plastic urethane used by Nike IHM are extremely limited. The company has recently developed a non-woven plastic based fabric material that can be made from recovered plastics and from which Nike will soon be producing backpacks and other products. The pelletizer will enable the use of waste plastics that are currently disposed of. Nike IHM anticipates **diverting 550 tons** from the waste stream annually and **creating four new full time employee positions** with this project.



# Missouri Market Development Program

## Business Assistance

### Summary of FY 2011 Projects

Company	City	Material	Est Tons Diverted Annually	Est New Jobs	Award	Additional Investment	Est. Payroll Addition	Est. Cost Savings Annually
EXT, Inc	Excelsior Springs	Plastics	200	2	\$46,000.00	\$60,187	\$65,400	\$7,000
Customix Corp dba Aggieville USA	Mountain Grove	Food waste	6,000	5	\$50,000.00	\$120,000	\$163,500	\$210,000
Thomason Bros, Inc.	Mansfield	Foood Waste	20,000	9	\$50,000.00	\$175,000	\$294,300	\$700,000
Nike IHM	St. Charles	Plastics	550	4	\$50,000.00	\$400,000	\$130,800	\$19,250
Bryant Plastics	Gainsville	Plastics	240	3	\$50,000.00	\$104,500	\$98,100	\$8,400
Fick Supply Services, Inc.	Wildwood	wood	18,750	1	\$50,000.00	\$706,746	\$32,700	\$656,250
3-G Processing, LLC	Mountain Grove	Food waste	260,000	30	\$50,000.00	\$910,000	\$981,000	\$9,100,000
Foundation Workshop, Inc.	Grandview	Plastics	156	2	\$35,500.00	\$47,133	\$65,400	\$5,460
<b>FY11 AWARDED TOTALS</b>			<b>305,896</b>	<b>56</b>	<b>\$381,500</b>	<b>\$2,523,556</b>	<b>\$1,831,200</b>	<b>\$10,706,360</b>

Payroll = \$32,700 per job based on 2000 RW Beck REI study estimates

Savings = \$35 per ton average landfill disposal fee



# Missouri Market Development Program

## Business Assistance

### Summary of FY 2011 Active Projects (previously awarded – still open)

In addition to the projects awarded in FY 2011, sixteen previously awarded projects were actively managed by the Program during the fiscal year.

Company	City	Material	Est.Tons Diverted Annually	Est. New Jobs	Award	Invest-ment	Payroll	Savings
Missouri Organics Recycling	KC	organics	4,500	0	\$33,500	\$67,000	\$0	\$157,500
Stanfill Family LP dba Rustique Enterprise	O'Fallon	plastics	300	4	\$50,000	\$135,000	\$130,800	\$10,500
All Points Recycling	Cassville	plastics	234	2	\$45,500	\$65,515	\$65,400	\$8,190
Enginuity, LLC	Plastics	plastics	2,500	12	\$50,000	\$112,000	\$392,400	\$87,500
GT Management, LLC	Joplin	C&D	6,000	2	\$50,000	\$128,900	\$65,400	\$210,000
Braik Brothers Tree	Columbia	wood	2,500	2	\$50,000	\$400,000	\$65,400	\$87,500
Hampton Alternative Energy	Triplette	organics	21,462	2	\$50,000	\$3,000,000	\$65,400	\$751,170
BFC Composting	Perryville	organics	3,360	2	\$50,000	\$146,000	\$65,400	\$117,600
Sikeston Com. Sh. Wkshp	Sikeston	wood	1,450	1	\$50,000	\$227,198	\$32,700	\$50,750
Randolph Cnty Sh. Ind.	Moberly	wood	180	2	\$50,000	\$75,000	\$65,400	\$6,300
Thomason Brothers, Inc	Mansfield	Food	11,700	9	\$50,000	\$375,000	\$294,300	\$409,500
Swift Construction Co.	Joplin	ABRS	75,000	1	\$50,000	\$105,000	\$32,700	\$2,625,000
Double G Brands, Inc.	Pacific	Food	100	4 to 5	\$50,000	\$140,000	\$147,150	\$3,500
Asphalt Products, Inc.	Jefferson City	ABRS	10,000	1	\$50,000	\$125,000	\$32,700	\$350,000
Cedar Ridge Inn., LLC	Springfield	Carpet	672	5	\$50,000	\$68,000	\$186,000	\$23,520
Coon Mfg., Inc	Spickard	HDPE	665	2	\$50,000	\$100,410	\$74,400	\$23,275
FY11 PREVIOUSLY AWARDED ACTIVE PROJECT TOTALS			140,623	51	\$779,000	\$5,270,023	\$1,715,550	\$4,921,805



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# Missouri Market Development Program

## Technical Assistance

### FY 2011 Projects

In Fiscal Year 2011, the Missouri Market Development Program piloted a new technical assistance process in which applicants provide bids for project work that may be completed by the most appropriate entity. Projects were awarded to two Missouri businesses

#### **St. Peters – Freiezo, LLC**

*Freiezo, LLC* (Saint Peters) was awarded \$5,000 to measure turbine efficiency and mechanical-to-electrical conversion for turbines that will be constructed with recycled plastic. Previous technical assistance from the Program assisted in developing the blades, each unit of which will use approximately 100 pounds of recovered material. Prototypes for these blades have been delivered and final development requires testing of the mechanical system of energy harvesting. This project proposes to use senior students at the Missouri University of Science and Technology to complete the required testing. If successful, completion of the project will allow the product to proceed into the marketplace with the necessary technical data to put it in a competitive position.

#### **Rolla – Chapman Cusustom Products**

*Chapman Custom Products* (Rolla) requested \$12,000 towards a \$15,000 project to develop a marketing strategy for products made from solid-surface waste materials. The company has made sample products and this project intends to perform a competitive analysis of the product and evaluate product costs, pricing distribution and availability of additional solid surface substrate scrap. Additionally, the project will research alternate uses and product concepts for the waste material.

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# Missouri Market Development Program

## Informational Services

### Working Towards Solutions

During the fiscal year, staff advised businesses on market conditions, locating recovered material feedstocks, determining markets, developing products, and creating business presentations. Staff also responded to requests for information on marketing, planning assistance, and markets for recyclables from governments and not-for-profit organizations.

The Program publishes and distributes a *Missouri Recycled Products Directory* listing Missouri manufacturers and distributors of recycled content products. The Missouri Market Development Program assisted businesses, governments, organizations and individuals in locating specific recycled content products.

Information sharing is an important aspect of the Missouri Market Development's efforts to help build Missouri's recycling infrastructure. The Missouri Market Development Program provides resources and informational services to businesses, governments, and other organizations to increase manufacturing, marketing, or purchasing of recycled content products.

Missouri Market Development Program staff promoted Missouri's recycling industry and the "buy recycled" message in speaking engagements and workshops and participated in state, regional and national recycling issue conferences and meetings.

Staff develops and maintains information for a Missouri Market Development Program website and continues to gather and refine information for future web publication. The website enables businesses to download the Missouri Market Development Program Application for Financial Assistance and access other program publications and information.

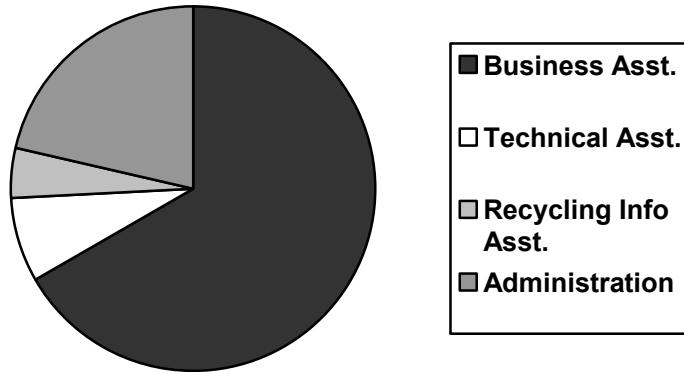
During the fiscal year, Missouri Market Development Program staff supported and participated in state, region and nation-wide organizations and activities to gain and share knowledge and to develop professional relationships in the areas of recycling, economic development, solid waste, and related environmental or business areas. Active involvement in these initiatives enables Missouri Market Development staff to approach problem solving from many perspectives and better facilitate growth of Missouri's recycling businesses.



# Missouri Market Development Program

## Funding

### Fiscal Year 2011 Expenditures



#### Business Assistance

Provides: Direct financial assistance to businesses, one-on-one marketing assistance, administration of financial assistance, monitoring for 24 agreements.



Contract Assistance	\$40,020
Financial Assistance provided to companies	\$381,500
<b>Subtotal</b>	<b>\$421,520</b>

#### Technical Assistance

Provides: Direct assistance to businesses and specific technical assistance projects

Contract Assistance	\$29,397
Technical Assistance projects	\$17,000
<b>Subtotal</b>	<b>\$46,397</b>

#### Recycling Information Assistance

Provides: Recycling information services to businesses, governments, and individuals, recycled products directory.

Contract Assistance	\$29,397
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#### Administration

Personnel	\$88,755
Operating Expenses	\$45,462
<b>Subtotal</b>	<b>\$134,217</b>



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# Missouri Market Development Program

## Outlook

### Focusing on Opportunity

#### Economy

Recycling has a significant bottom line. Recycling market development is a win-win endeavor, providing business opportunity for Missouri entrepreneurs, creating jobs and helping to protect the environment at the same time. Missouri Market Development Program participants are primarily small businesses, often located in rural areas where business development opportunities are limited.

#### Environment

The environmental impetus for recycling is increasingly timely. Recycling reduces pollution, conserves natural resources, saves energy, reduces greenhouse gas emissions and lessens reliance on landfills for disposal. The environmental benefits of recycling are well established.

#### Challenges

While recycling is strong in Missouri and in the nation, the recycling industry still faces many challenges. Recycling market prices rise and fall in response to many factors that are difficult to manage on a local level. Low cost manufacturing materials imported into the U.S., global economic downturns and inexpensive disposal rates can all impact the cost of recycling markets. Many recycling businesses still face significant hurdles when trying to secure financing from the investment community. Many resources are still being thrown away instead of recovered for recycling, and recycled content products continue to struggle for prominence in marketplaces.

#### Opportunities

Recycling, however, is a growth industry with many business opportunities. During the past decades, local, state and national programs have worked together to reduce waste and increase recycling. Many Missouri citizens have already made recycling a part of daily life. As the scale of recovery grows, the cost competitiveness of recycled materials as a substitute for virgin materials will improve. Recycling market development provides a myriad of opportunities for creating and retaining jobs, for encouraging new enterprise and for increasing the competitiveness of existing enterprise.

#### Missouri Market Development Program

The Missouri Market Development Program continues to draw on the expertise of business owners and operators, government officials, and others knowledgeable and active in recycling market development. Since recycling does not really occur until collected materials are returned to the economic mainstream in the form of products people purchase and use, the Missouri Market Development Program will continue to work to ensure that materials collected are used by manufacturers as feedstocks for products. By converting waste into valuable raw materials, recycling creates jobs, builds more competitive manufacturing industries and adds value to Missouri's economy.



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